

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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IDENTIFICATION PAGE

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Applicant: HASSAN, AZIZ et al.

Atty. Docket No: BSN9

Serial No: 10/666,488

Examiner: NATHAN M. NUTTER

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Group Art Unit: 1711

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For: NOVEL MULTIFUNCTIONAL POLYMER FOR USE IN HOT MELT ADHESIVE
APPLICATIONS

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MAIL STOP APPEAL BRIEF-PATENTS

Commissioner for Patents

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APPELLANT'S REPLY BRIEF

This Reply Brief to the Examiner's Answer, mailed September 7, 2007, is being
submitted in accordance with 37 CFR § 41.41.

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U.S. Ser. No. 10/666,488
BSN9 ReplyBr

TABLE OF CONTENTS

		PAGE
	TABLE OF CONTENTS	2
	1. STATUS OF CLAIMS	3
5	2. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	4
	3. ARGUMENT	5
	Introductory Comments	5
10	A. Whether Claims 1 and 3-15 are unpatentable under the doctrine of obviousness-type double patenting, as being unpatentable based on Yalvac <u>et al.</u> (U.S. Pat. No. 6,552,110 B1).	5
	1) Sole Assignment/Ownership of this Application By HRD Corp. Mandates that Rejections Under Doctrine of Obviousness-Type Double Patenting Are Improper	5
15	B. Whether Claims 1 and 3-16 are unpatentable under 35 U.S.C. §102(b), as being anticipated by Werenicz <u>et al.</u> (U.S. Pat. No. 6,120,887).	8
	1) Rejection Under 35 U.S.C. §102(b) is Improper Because Werenicz <u>et al.</u> Is Not A Proper Reference	8
20	a) Claims 1 and 3-15	8
	b) Claims 16, 26-27	10
	4. CONCLUSION	12
	5. TABLE OF AUTHORITIES	13

1. **STATUS OF CLAIMS**

There are thirty-two (32) Claims in the application.

Claims 1, 16, 28 and 31 are the independent Claims.

The status of the Claims as set out in Office Paper No. 0206 (Office Action mailed 17 February 2006) is as follows:

Claims allowed:	None.
Claims objected to:	None.
Claims rejected:	Claims 1, 3-16, and 18-27.
Claims cancelled:	Claims 2, 17 and 28-30.
Claims withdrawn:	Claims 31-32.
The Claims on Appeal are:	Claims 1,3-16 and 18-27.

2. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 3-15 and 18-27 stand rejected under judicially created doctrine of obviousness-type double patenting, as being unpatentable over one reference, the Yalvac et al. patent (U.S. Pat. No. 6,552,110, "the '110 reference", or "Yalvac et al."). The rejection of Claims 1, 3-16 and 18-27 over the Werenicz et al. patent (U.S. Pat. No. 6,120,867 ("the '867 reference" or "Werenicz et al.") has been expressly withdrawn by the Examiner in the Examiner's Answer.

Claims 1, 3-15 and 18-27 stand rejected under 35 U.S.C. §102(e), as being unpatentable over the Yalvac et al. patent.

Claims 1, 3-16 and 18-27 stand rejected under 35 U.S.C. §102(b), as being unpatentable over the Werenicz et al. patent; the rejection of these claims under 35 U.S.C. §102(e) over the Werenicz et al. patent appears to have been withdrawn.

The rejections of these Claims could be grouped as follows:

Whether Claims 1 and 3-15 are unpatentable under the doctrine of obviousness-type double patenting, as being unpatentable based on Yalvac et al. (U.S. Pat. No. 6,552,110).

Whether Claims 1 and 3-15 are unpatentable under 35 U.S.C. §102(e), as being anticipated by Yalvac et al. (U.S. Pat. No. 6,552,110).

Whether Claims 1, 3-16 and 18-27 are unpatentable under 35 U.S.C. §102(b), as being anticipated by Werenicz et al. (U.S. Pat. No. 6,120,887).

3. ARGUMENT

Introductory Comments

For purposes of this Reply Brief, the arguments will be addressed to issues raised in the Examiner's Answer. As stated in the Appeal Brief, the patentability of several dependent claims has been argued separately; otherwise the patentability of the dependent claims will depend upon the outcome of the argument for their respective independent claim.

A. Whether Claims 1 and 3-15 are unpatentable under the doctrine of obviousness-type double patenting, as being unpatentable based on Yalvac et al. (U.S. Pat. No. 6,552,110 B1).

1) Sole Assignment/Ownership of this Application By HRD Corp. Mandates that Rejections Under Doctrine of Obviousness-Type Double Patenting Are Improper

Claims 1 and 3-15 were rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of the Yalvac et al. reference (U.S. Pat. Nos. 6,552,110 B1).

The Examiner indicated in his Answer (pp.5-6) and previous Office Papers (No. 0205 at page 2 and No. 0206 at page 3). that a timely filed terminal disclaimer could be used to overcome a rejection based on a nonstatutory double patenting ground, provided the conflicting application or patent is shown to be commonly owned with this application. 37 C.F.R. § 1.130(b). Note that 37 C.F.R. 1.130(b) referred to in the Examiner's Answer (p.3, under "Double Patenting") has been "removed and reserved", effective Dec. 10, 2004.

In the Appeal Brief, Applicant stated why it would have been pointless to file a terminal disclaimer; had it been erroneously filed, it could not have been corrected at a later date (See Appellants' Appeal Brief, pp. 13-15). Yet the Examiner maintained the position that a terminal disclaimer would have been appropriate to obviate this obviousness-type double patenting rejection, because the present pending application and the reference share a common inventor (Examiner's Answer, p. 6, last three lines to p. 7, line 2).

In his Answer, the Examiner also maintains the position that the applied reference, U.S. Pat. No. 6,552,110 B1 still has a common assignee with the instant application (Examiner's

Answer, p. 5, second full paragraph). The first page of the Yalvac et al. patent clearly states that this patent is assigned to both Dow Global Technologies, Inc, and to Nor-Skilt; the record of the instant application shows that the instant application is assigned to HRD Corp. (See Evidence Appendix, Appellant's Appeal Brief, Exhibits A & B, for the cover page of Yalvac et al. U.S. Pat. No. 6,552,110 B1 and the "Patent Assignment Abstract of Title" for U.S. Pat. No. 6,552,110 B1, respectively, and Exhibit C, showing the chain of title of the instant application, stating that HRD Corp. is the sole assignee of this application). Yet in the Response to Argument section (Examiner's Answer, p. 6, last three lines to p.7, line 2), the Examiner states that a terminal disclaimer is still appropriate because the instant application and the reference share a common inventor, regardless to whom the assignment has been made.

But such a statement about a terminal disclaimer being appropriate is just not in the Patent Rules governing the use of terminal disclaimers, 37 C.F.R. §§ 1.130 and 1.321, the relevant sections of which are reproduced below.

The plain language of the Rules are clear—there must be a common assignee, and these Rules are silent on whether there has to be a common inventor.

37 C.F.R. §1.130 Affidavit or declaration to disqualify commonly owned prior art or published application as prior art.

(a) When any claim of an application or a patent under reexamination is rejected under 35 U.S.C. 103 on a U.S. patent or U.S. patent application which is not prior art under 35 U.S.C. 102(b), and the inventions defined by the claims in the application ... and by the claims in the patent or published application are not identical but are not patentably distinct, and the inventions are owned by the same party, the applicant ... may disqualify the patent or patent application publication as prior art. The patent or patent application publication can be disqualified as prior art by submission of:

- (1) A terminal disclaimer in accordance with §1.321(c); and
- (2) **An oath or declaration stating that the application ... and patent or published application are commonly owned by the same party, and that the inventor named in the application ... is the prior inventor under 35 U.S.C. 104.** (Emphasis added.)

1.321 Statutory disclaimers, including terminal disclaimers.

(b) An applicant or assignee may disclaim or dedicate to the public the entire term, or any terminal part of the term, of a patent to be granted. Such terminal disclaimer is binding upon the grantee and its successors and assigns. The terminal disclaimer, to be recorded in the Patent and Trademark Office, must . .

(c) A terminal disclaimer, when filed to obviate judicially created double patenting in a patent application or in a reexamination proceeding except as provided for in paragraph (d) of this section, must:

(1) Comply with the provisions of paragraph (b)(4) of this section;

(2) Be signed in accordance with paragraph (b)(1) of this section if filed in a patent application ... ; and

(3) Include a provision that any patent granted on that application ...shall be enforceable only for and during such period that said patent is commonly owned with the application or patent which formed the basis for the judicially created double patenting.

(d) A terminal disclaimer, when filed in a patent application or in a reexamination proceeding to obviate double patenting based upon a patent or application that is not commonly owned but was disqualified under 35 U.S.C. 103 (c) as resulting from activities undertaken within the scope of a joint research agreement, must:

(1) Comply with the provisions of paragraphs (b)(2)) through (b)(4) of this section;

(2) Be signed in accordance with paragraph (b)(1) of this section if filed in a patent application ...

(3) Include a provision waiving the right to separately enforce any patent granted on that application ... and the patent or any patent granted on the application which formed the basis for the double patenting, ...shall be enforceable only for and during such period that said patent and the patent, or any patent granted on the application, which formed the basis for the double patenting are not separately enforced.

Thus, the Rules clearly state that the pending application and the patent or published patent application have to be owned by the same party. Rule 37 C.F.R. 1.130(a)(2) requires two elements to support the oath or declaration for a terminal disclaimer. The first element is that the application and the patent or published application are commonly owned by the same party; the second element is that the inventor named in the application be the prior inventor.

The Rule's language clearly requires both elements to be present. Even if one inventor is the same on the application and the patent or published patent application, as alleged in the Examiner's Answer, this is still not sufficient for the oath or declaration supporting such a terminal disclaimer, because the Rule also requires the application and the patent or published application to be commonly owned by the same party. MPEP §706.02(I)(2) defines "common ownership".

The term "commonly owned" is intended to mean that the subject matter which would otherwise be prior art to the claimed invention and the claimed invention are entirely or wholly owned by the same person(s) or organization(s)/business entity(ies) at the time the invention was made. ...Common ownership requires that the person(s) or organization(s)/business entity(ies) own 100 percent of the subject matter and 100 percent of the claimed invention.

As Applicant has stated in the Appeal Brief, and shown by the evidence submitted therein, both elements are absent, because the present pending application is solely owned by HRD Corp.

B. Whether Claims 1 and 3-16 are unpatentable under 35 U.S.C. §102(b), as being anticipated by Werenicz et al. (U.S. Pat. No. 6,120,887).

1) Rejection Under 35 U.S.C. §102(b) is Improper Because Werenicz et al. Is Not A Proper Reference

a) Claims 1 and 3-15

This new ground of rejection of Claims 1, 3-16 and 18-27 was raised in the Examiner's Answer. Applicants submit that this rejection is improper because the Werenicz et al. reference is not an appropriate reference under 35 U.S.C. §102(b). In order to be a valid reference under 35 U.S.C. §102(b), the reference must teach every aspect of the claimed invention either explicitly or impliedly, and any feature not directly taught must be inherently present. MPEP 706.02.

As the Examiner points out in his Answer (pp. 5-6) the Werenicz et al. reference recites selected properties of the ethylene/alpha-olefin interpolymers, and certain hot melt adhesives containing them. But although there may be some overlap of properties between the claimed composition and those of the reference, the reference fails to provide any data that would support a conclusion that the other properties of the reference's adhesives, such as the PAFT or SAFT would be similar to those of the claimed invention.

As discussed in the Appeal Brief, Claim 1 describes a hot melt adhesive composition that consists essentially of a homogeneous ethylene/alpha-olefin interpolpolymer and a tackifier. Claim 1 includes a description of some of the properties of the inventive ethylene/alpha-olefin interpolymers. But unlike traditional hot melt adhesives which comprise a polymer, a tackifier and a wax (p. 2, lines 21-24), the inventive ethylene/alpha-olefin interpolymers can function as both the wax and polymer components of the hot melt adhesive (p. 5, lines 5-8 and lines 21-28 of the specification).

In a hot melt adhesive composition, the polymer component provides the strength to the adhesive bond (p. 2, line 25 of the specification). The tackifier provides tack to the adhesive by improving wetting, which serves to secure the items to be bonded while the adhesive sets, and reduces the viscosity of the system making the adhesive easier to apply to the substrate (p. 2, lines

25-28 of the specification). The wax shortens the open time and also reduces the viscosity of the system (p. 2, lines 28-29 of the specification).

Unlike ethylene/alpha-olefin interpolymers described in prior art references, the ethylene/alpha-olefin interpolymers of the present invention are synthesized in a single, continuously stirred reactor (Example 1, page 36, line 3 - p. 38, line 7 of the specification), using a multiple catalyst system described in Example 5 (commencing of p. 47 through p. 50, and particularly in the footnotes to Tables 2 (page 39) and 5 (page 43), and page 48, lines 3-17 of the specification). By contrast, the polymer components used in the adhesive compositions of the reference were synthesized using a dual vessel system (Werenicz et al., col. 17, line 27 - col. 20, line 63).

The reference utilizes the composition in a typical hot melt adhesive formulation, which contains the polymer, a tackifier, and a wax. The wax is added to the composition in order to reduce the viscosity of the composition. Unlike the compositions described in the reference, the claimed invention comprises an ethylene/alpha-olefin interpolymers in combination with a tackifier to produce a hot melt adhesive composition (Claim 1) or a cellulosic article formed using such a hot melt adhesive composition (Claim 16). Note the absence of any wax in the claimed compositions.

Therefore, because the reference fails to recite all of the parameters of the claimed invention, either explicitly or impliedly, it is an improper reference under 35 U.S.C. §102(b), and the Board must reverse the rejection of Claims 1 and 3-15.

b) Claims 16, 26-27

Applicant reiterates the legal principles described in the prior section regarding why the Werenicz et al. reference is an inappropriate reference under 35 U.S.C. §102(b), for it fails to disclose all of the elements of the claimed invention.

The Werenicz et al. reference fails to teach use of cellulosic products as a substrate for adhesives.

The reference provides a listing of substrates to which the reference's composition could be applied, and, viewed on the whole by one of ordinary skill in the art, the emphasis of the reference relates "to a textile material and hygienic disposable articles comprising a bodily fluid impermeable barrier layer" (Abstract). The section starting at col .5, lines 48 - col. 6, line 2, also

indicates an emphasis on a hygienic article.

The main substrate used in the reference is a polypropylene nonwoven material (col. 20, lines 63-67) onto which the adhesive composition is applied. This is the substrate used in the various examples, including the water permeability test (col. 22, lines 38-47) and Tables IV A through IV C (columns 27-28). The reference does mention other possible substrates (col. 4, lines 37-42), but focuses on the polypropylene nonwoven material.

When viewed in its' entirety, and the focus on polypropylene substrates, the reference could not be intending to cover cellulosic articles, such as corrugated cardboard, kraft paper, linerboard and paper as claimed by applicant in claims 16 and 26-27.

Therefore, the Board must reverse the rejection of Claims 16 and 26-27 based on the Werenicz et al. reference.

4. **CONCLUSION**

Applicant respectfully submits that Claims 1, 3-16, and 18-27 define patentable subject matter, and for the reasons presented above, the Board must reverse the rejections of these Claims, determine that these Claims define patentable subject matter, and allow the present pending Claims.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office on this 7th day of November, 2007.

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5. TABLE OF AUTHORITIES

Page

STATUTES

5	35 U.S.C. §102(b)	4, 8, 9
	35 U.S.C. §102(e)	4

RULES

	37 C.F.R. §1.130.....	6
	37 C.F.R. §1.130(a)	5, 6
10	37 C.F.R. §1.130(a)(2)	7
	37 C.F.R. §1.130(b)	5, 6, 7
	37 C.F.R. §1.130(c)	6, 7
	37 C.F.R. §1.130(d).....	7
	37 C.F.R. §1.321	6, 7
15	37 C.F.R. §1.321 (b).....	6
	37 C.F.R. §1.321(c)	6
	37 C.F.R. §1.321(d)	7
	37 C.F.R. §41.41	1

20 MANUALS

	MPEP §706.02	8
	MPEP §706.02(1)(2)I.....	7